

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of
Vibhor Julka

Serial No.: **10/672,233**

Filed: **September 25, 2003**

For: **A Method and Apparatus for Efficient
Dormant Handoff of Mobile Stations Having
Multiple Packet Data Service Instances**

Docket No: **4740-223**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PATENT PENDING

Examiner: Fred A. Casca

Group Art Unit: 2617

Confirmation No.:8712

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

6 July 2007

Date

Kathleen Koppen
Kathleen Koppen

This correspondence is being:

- ☒ electronically submitted via EFS-Web

RESPONSE TO OFFICE ACTION

This paper timely responds to the Office Action mailed on 6 April 2007. No fees should be required for entry of this response, but any fees that are required may be charged to Deposit Account 18-1167. Applicant respectfully requests reconsideration of the instant application in light of the below remarks.

REMARKS

The 102 Rejection of Claim 17

Claim 17 is rejected as anticipated by the teachings in U.S. Pub. No. 2003/0063584 A1 to Sayeedi. In the context of a Packet Control Function (PCF) managing dormant handoffs of mobile stations, claim 17 includes the explicit limitations of “recognizing that a mobile station undergoing dormant handoff has multiple packet data service instances,” and in response, “sending an indication of the multiple packet data service instances to a Base Station (BS) supporting the dormant handoff of the mobile station.” Thus, claim 17 by its explicit language defines a handoff management method that handles dormant handoff differently for mobile stations that have more than one (packet data) service instance. See paragraph [0009] of the instant application, which provides a detailed example explanation of multiple packet data service instances.

Sayeedi also relates specifically to dormant mode packet data handoff of mobile stations, but Sayeedi's focus is on a purportedly more efficient approach to handoff signaling that avoids traffic channel assignments when there is no packet data to send. However, nowhere in Sayeedi is the concept of multiple service instances discussed, mentioned, or even hinted at. The undersigned has read Sayeedi and has performed electronic searching on the disclosure and drawings of Sayeedi, and cannot find one single instance of anything related even to the concept of multiple service instances, even when the search extends to all likely or reasonable variations in phrasing or wording.

Put simply, Sayeedi is utterly silent with respect to multiple service instances. No one skilled in the art could read Sayeedi and credibly state that it offers any teachings about managing dormant mode handoff differently based on recognizing that the mobile station undergoing dormant handoff has multiple packet data service instances. Sayeedi therefore fails as a matter of law as an anticipating reference. As the examiner well knows, an anticipation

rejection is appropriate only where the allegedly anticipating reference explicitly or implicitly teaches each and every limitation of the claim at issue, in the identical arrangement as claimed.

It is easy to prove that Sayeedi does not anticipate claim 17. For example, the rejection arguments made against claim 17 state that paragraphs 2-9 of Sayeedi teaches a PCF recognizing that a mobile station undergoing dormant handoff has multiple packet data service instances. Those paragraphs simply describe background for the dormant handoff problem of a mobile station in the context of IS-2001 communication networks. The identified paragraphs explicitly do talk about dormant mode packet data handoffs, but there is absolutely no distinction made or even hinted at regarding the detection of multiple packet data service instances.

Applicant emphasizes to the examiner that claim 17 does not claim generic processing related to dormant mode packet data handoff, but rather carefully claims recognizing that a given dormant mode packet data handoff involves a mobile station having multiple packet data service instances. Again, Sayeedi offers no teachings relevant to the explicit claim limitations and fails as an anticipating reference. Sayeedi does not provide a legal basis for making a *prima facie* case of anticipation because it does not teach the claim limitations at issue and the anticipation rejection will fail on appeal for that reason. Applicant respectfully requests withdrawal of the rejection of claim 17.

The 103 Rejections of Claims 1-6, 8-13, 16, 18-23, 25, 28-40, and 43

Claims 1-6, 8-13, 16, 18-23, 25, 28-40, and 43 are rejected as obvious over Sayeedi in further view of U.S. 6,026,086 to Lancelot *et al.* These rejected claims included independent method claim 1 directed to managing dormant handoffs at a base station, independent method claim 25 directed to managing dormant handoffs at a PCF, independent method claim 29 directed to managing dormant handoffs in a CDMA2000 network (IS-2000), and independent apparatus claim 30 directed to a base station controller that includes a control circuit to manage dormant handoff.

All of these independent claims include explicit limitations to recognizing or otherwise determining that a mobile station undergoing dormant handoff has more than one packet data service instance. As explained in the arguments given above against the anticipation rejection of claim 17, Sayeedi does not provide a single teaching that can be credibly (or legally) argued as relating to Applicant's carefully described and claimed approach of distinguishing between dormant mode packet data handoff of a mobile station that has one packet data service instance versus handoff of a mobile station that has more than one packet data service instance.

The examiner admits that Sayeedi "does not specifically disclose assigning a traffic channel to the mobile station so that the mobile station can send additional dormant handoff requests (sending control signals over a traffic channel), as claimed." However, the examiner contends that Lancelot provides those teachings and that it would have been obvious to combine Lancelot with Sayeedi to arrive at the claimed invention.

Of course, one glaring problem with this argument is that Sayeedi explicitly teaches away from assigning a traffic channel to a mobile station undergoing dormant handoff unless there is data to send to the mobile station. See, for example, paragraphs [0016] – [0018] of Sayeedi. There, Sayeedi teaches a dormant handover procedure that explicitly avoids the assignment of a traffic channel in instances when there is no data to send to the MS 140. See, in particular, the last sentence of paragraph [0016] that states that if no traffic channel is needed, then Sayeedi's "invention" may be used. See, also, the last sentence of paragraph [0018], which identifies that invention as being a connectionless message transfer for handover that avoids transport layer signaling (i.e., avoids traffic channel assignment).

Indeed, any fair reading of Sayeedi reveals that its inventive focus is on avoiding the use of traffic channels in dormant handoff when they are not needed for actual traffic delivery, in favor of a connectionless messaging approach which Sayeedi characterizes as more efficient. It

is legally incorrect, then, for the examiner to argue that one skilled in the art would be motivated in any regard to combine the teachings of Lancelot with Sayeedi. Put more simply, Sayeedi teaches avoiding the use of traffic channels in dormant handover unless needed for traffic delivery.

Therefore, it is simply not credible to argue that the skilled artisan would have modified Sayeedi such that it used traffic channels (when not otherwise needed for traffic delivery) for dormant handover in contradiction of its own teachings. The 103 rejections fail as a matter of law for this reason alone and must be withdrawn.

Further, the examiner's own rejection arguments reveal that Sayeedi does support not its argued-for usage in the 103 rejections. As just one example, in the context of managing dormant handoff at a base station, claim 1 includes the limitation of "recognizing that the mobile station has additional packet data service instances requiring dormant handoff and selectively assigning a traffic channel to the mobile station to cause the mobile station to send additional dormant handoff requests for the additional packet data service instances over the assigned traffic channel."

The instant application carefully explains that a dormant mobile station sends origination messages over a common access channel, which is fine unless there are multiple packet service instances which require multiple messages for handing over all of the service instances. In such cases, signaling congestion on the common channel is avoided by recognizing that multiple service instances are involved in the handover and correspondingly assigning a traffic channel to the mobile station, which causes the mobile station to send multiple Enhanced Origination Messages for its multiple packet data service instances over the newly assigned traffic channel rather than burdening the common channel. See, for example, paragraphs [0012] and [0013] of the instant application.

Against the explicit limitation of claim 1 presented immediately above, p. 3 of the Office Action states that Sayeedi teaches "BSC receives the Origination message, which indicates ...whether the MS 140 has data ready to send. If the MS140 has data ready to send, then a traffic channel will be required...to establish this channel." First, it must be noted that Sayeedi stating that a traffic channel is assigned if the MS 140 has data to send has nothing to do with the above claim 1 limitation at issue. Second, it must be noted that Sayeedi discloses that the assignment of a traffic channel when there *is* data to send is "conventional" processing, and has nothing to do with managing dormant handover when there is not any data to send.

In contrast, according to the limitations of the claims rejected as obvious by the examiner, Applicant's instant invention explicitly does assign a traffic channel to a mobile station undergoing dormant handoff (no data to send), in cases where it is recognized that the mobile station has multiple packet data service instances, all of which must be handed over. In such cases, Applicant teaches and claims the assignment of a traffic channel to the mobile station, not to carry traffic data, but rather to carry the multiple messages needed for handing over multiple packet data service instances, thereby avoiding burdening the common access channel that would conventionally be used for such messaging.

Sayeedi offers no such teachings, and Lancelot does not provide those teachings. Therefore, the combination of Sayeedi and Lancelot fails as a matter of law to render claims 1-6, 8-13, 16, 18-23, 25, 28-40, and 43 obvious. Again, Applicant respectfully requests the withdrawal of all such rejections.

The 103 Rejections of Claims 7, 26, and 27

Claims 7, 26, and 27 are rejected as obvious over Sayeedi in combination with Lancelot, in further combination with "well known prior art." Applicant therefore understands these rejections as being based on the Patent Office taking "Official Notice" that any limitations in

claims 7, 26, and 27 that are not taught or suggested by the combination of Sayeedi and Lancelot are nonetheless notoriously well known.

Before addressing the problems with the Office's Official Notice, Applicant points out that the independent claims from which claims 7, 26, and 27 depend are patentable over all of the cited references and that, therefore, the rejections against these dependent claims are moot.

Turning to the Office Notice issue, p. 12 of the Office Action states that "the examiner takes official notice of the fact that the concept of using counters for assigning and releasing traffic resources in communication [sic] is well known in the art." The Office Action goes on to state that, "[t]hus, it would have been obvious to one of the ordinary skills [sic] in the art at the time of invention to modify the method of Sayeedi/Lancelot by implementing the well known concept of counting and thereby provide a more efficient resource allocation system."

Frankly, it is hard to know where to begin in the criticism of the above rejection arguments. They are fundamentally flawed in both the legal and technical sense, and represent significant misapplication of the law.

As a starting point, Section 2144.03 A of the MPEP cautions examiners that it is appropriate to take official notice without supporting documentary evidence only "where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known." That same section of the MPEP emphasizes that cautionary guidance by citing In re Ahlert, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), where the court held that notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute."

Applicant submits that the assertion that counters are used in assigning and releasing traffic resources is not capable of such instant and unquestionable demonstration as to defy dispute. Thus, Official Notice in this case without supporting evidence is grossly inappropriate.

More fundamentally, however, Applicant respectfully points out that the claims at issue do not generically claim the “concept of using counters for assigning and releasing traffic resources in communication,” as the examiner’s explicit language asserts. As an example, claim 7 depends from claim 1, and includes the explicit limitations of “counting subsequent dormant handoff requests sent by the mobile station over the assigned traffic channel and releasing the traffic channel once the count equals the number of additional packet data service instances.” The claim is set in the context of claim 1, which recognizes that a mobile station undergoing dormant handoff has multiple packet data service instances to be handed over, and, in response, assigns a traffic channel to the mobile station so that the multiple handoff requests corresponding to the multiple service instances are carried on the traffic channel.

Thus, the counter limitation at issue in claim 7 is quite specific and is utterly distinct from anything taught or suggested by Sayeedi, by Lancelot, or by any argued-for combination of Sayeedi and Lancelot. In reality, then, the examiner is taking official notice that is well known to release a traffic channel after the count of handover requests matches the count of multiple packet data service instances being handed over for a dormant mobile station. Applicant invites the examiner to reconsider that position as being legally unsupportable.

Closing

While Applicant appreciates the indication of allowable subject matter, it must be said that all of the rejections presented in the Office Action, whether they are anticipation rejections based on Sayeedi alone, or obviousness rejections based on the base combination of Sayeedi and Lancelot, fundamentally fail as a matter of law. These across-the-board failures arise not least because all of the examiner’s rejection arguments reflect a fundamental misunderstanding or mischaracterization of Sayeedi. Sayeedi offers no teachings or suggestions on the explicitly claimed limitations in all of Applicant’s claims relating to managing dormant handoff for a mobile station having multiple packet data service instances.

Because all rejections made in the Office Action erroneously rely on Sayeedi for such teachings, all rejections fail as a matter of law and must be withdrawn. The undersigned would welcome a phone call from the examiner if there are any questions regarding the arguments presented herein. In any case, for the reasons given herein Applicant believes that all claims stand in condition for immediate allowance, and looks forward to the withdrawal of all rejections and advancement of the instant application on its merits.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.



Michael D. Murphy
Registration No.: 44,958

Dated: 6 July 2007

1400 Crescent Green, Suite 300
Cary, NC 27518
Telephone: (919) 854-1844
Facsimile: (919) 854-2084